

Rhamnose Solution (20%, Sterile-Filtered)

Cat. No.: R1524587 | Pack size: 50ml | Storage: Room temperature

Overview

L-(+)-Rhamnose can serve as a carbon source for microorganisms. Additionally, it acts as an inducer for rhamnose-inducible promoters, which is widely applied in prokaryotic expression systems such as the Lemo21(DE3) strain. This product is sterilized via filtration through a 0.22 µm membrane and can be directly added to culture media.

Product Composition:

Product Name	Product Component	Molecular Formula/CAS No./ Molecular Weight	Formula per Liter	Sterilization Method
Rhamnose Solution (20%, Sterile-Filtered)	L-(+)-Rhamnose	C ₆ H ₁₂ O ₅ /10030-85-0/182.17	200g	0.22µm Filtration

Operation Protocol:

- Determination of optimal rhamnose concentration for Lemo21(DE3) strain:

For proteins that are difficult to express, a concentration gradient test of rhamnose is required. Add rhamnose at different concentrations (0, 100, 250, 500, 750, 1000, 2000 µM) when inoculating the large-scale shake-flask culture. This step is optional; rhamnose may be omitted for readily expressible proteins.

Precautions

1. Unopened rhamnose solution can be stored at room temperature for 1 year. For long-term storage, preservation at -20 °C is recommended. Discard the product immediately if contamination is observed after opening.
2. Rhamnose solution cannot be sterilized by autoclaving/high-temperature sterilization.

Specifications

Specification	Details
Specifications & Purity	Sterile-filtered, BioReagent, for Microscopy, 20% (w/v) in water
Stability And Storage	Store at room temperature long term (12 months).
Storage	Room temperature
Shipped In	Normal

Names and Identifiers

Identifier	Details
Isomeric SMILES	<chem>C[C@@H]([C@@H]([C@H]([C@H](C=O)O)O)O)O.O</chem>
WGK Germany	3
Alternate CAS	3615-41-6;6155-35-7
PubChem CID	20849066
Molecular Weight	182.17
Beilstein	3912643
Reaxys-Rn	4660356
CAS	10030-85-0
EC Number	600-058-2
Melt Point(°C)	82-92°C

Contact & Global Offices

Whether you have a technical question, need help with a quotation, or want to inquire about an order, our regional teams are ready to assist. Please contact the office for your region; for general inquiries, the North American office is the corporate primary.

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